Department for Work & Pensions

Department of Health & Social Care

Innovation and knowledge development amongst providers of occupational health

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July 2021

DWP research report no. 992

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First published July 2021

ISBN 978-1-78659-268-2

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Executive summary

This short summary presents the key findings from research conducted by IFF Research on behalf of the Work and Health Unit (WHU). The research aimed to understand:

- examples of innovative practice in occupational health (OH);
- approaches to developing and maintaining OH knowledge amongst OH providers;
- the challenges and barriers providers face when innovating and maintaining knowledge.

This was explored via 15 qualitative interviews with OH providers (13 with private providers, and two with NHS providers that sell OH services commercially). These were completed in two phases between February and May 2020, with the final six interviews taking place during the COVID-19 pandemic. 11 of the providers interviewed were engaged in innovation, 13 in knowledge development and maintenance (providers could fall into one or both of these categories), while 2 were not currently engaged in either. Interviews were completed with a range of sizes of provider that broadly reflected the fact that most OH providers are small-scale employers: 9 micro businesses, 4 small businesses and 1 large business were interviewed.

OH provider innovation tended to be focused on four main areas:

- software development (e.g. remote assessment capabilities);
- policy and procedure development (e.g. condition-specific guidance and ‘reasonable adjustment passports’ that employees could take with them to new roles);
- preventative measures (e.g. steps to improve emotional resilience and stress management);
- enhancements to employer knowledge and engagement (e.g. educating employers about the costs of OH inaction).

The triggers for these innovations tended to relate to achieving efficiencies and streamlining costs to maintain a competitive edge in a price-driven market; along with a commitment to optimising client services and employee outcomes. Innovations tended not to be targeted at the self-employed or small and medium enterprise (SME) employers; and were typically approached in an ad hoc manner, without structures, procedures or much in the way of evaluation. Collaboration between providers when innovating was rare, due to a lack of resources or providers not considering this a priority.

While cost-efficiency was a trigger for innovation, it was also a barrier that sometimes prevented it, both in terms of the direct costs of innovation and the indirect costs of taking staff away from income-generating activities. The difficulty of balancing time spent innovating with delivering day-to-day services was exacerbated by a shortage of qualified OH professionals in the sector.

OH providers most commonly developed and maintained knowledge through training, attending conferences/events, accessing journals and research papers, and informal networking. Again, there was a lack of formal systems, perhaps reflecting the relatively small scale of providers and the sector overall. There was more in the way of networks and structured learning for clinical staff such as doctors and nurses, however.

As with innovation, the main challenge to developing and maintaining knowledge was that of balancing this with day-to-day delivery and income generation.

There was little consensus on how best to address barriers either to innovation or developing and maintaining knowledge, but some suggested that tackling wider OH sector issues (lack of employer buy-in to the value of OH, and shortages of skilled professionals) would pay dividends. By increasing provider revenues and capacity, they could engage more with innovation and knowledge development and maintenance.

Overall, the findings point to a low demand for OH services amongst employers, combined with a marketplace where purchasers are often less informed, may have driven underinvestment in innovation in the market.

Acknowledgements

This research was commissioned by the Work and Health Unit (WHU), a joint unit between the Department for Work and Pensions (DWP) and the Department of Health and Social Care (DHSC).

We are very grateful to the guidance and support offered throughout by the Policy Analysis and Research team at the WHU, and particularly to Sarah Kenny, Nicola Moss, James Hudson and Maisie Payne.

We would also like to acknowledge and thank all the research participants for giving up their time to participate in interviews and providing valuable information on their experiences and views.

Authors' credits

Angus Tindle and **Lorna Adams**, Directors, headed up the IFF team responsible for the research. Both have considerable experience in research projects pertaining to interactions between health conditions and employment. **Isabel Kearney**, Senior Research Manager, was responsible for day-to-day management of the study and delivery of findings. **Sam Stroud**, Research Manager, and **Rachel Keeble**, Research Executive, worked on the fieldwork, delivery and analysis. **Sarah Coburn** and **Libby Eastwood** supported in production of the final report.

Glossary of terms

Commercial Occupational Health Providers Association (COHPA)	A non-profit non-regulatory membership association for occupational health and wellbeing providers.
Continuing Professional Development (CPD)	Learning activities that professionals engage in to develop and enhance their work-related skills and knowledge in a pro-active manner.
The Faculty of Occupational Medicine (FOM)	A charity focused on improving health at work; and the professional and educational body for occupational medicine in the UK.
Health Innovation Network	An NHS team that works across South London, connecting the NHS and academic organisations, local authorities, the third sector and industry. They aim to speed up innovation and improve care.
Health surveillance	A system of ongoing health checks to detect ill-health at an early stage to enable employers to introduce interventions to prevent issues from getting worse.
ISO9001	An internationally recognised Quality Management System (QMS) standard.
Management referral	The process through which employees are referred for OH support.
Micro, small and medium-sized enterprises (SMEs)	Enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding £25 million.
Occupational health (OH) services	Advisory and support services which help to maintain and promote employee health and wellbeing. OH services support organisations to achieve these goals by providing direct support and advice to employees and managers, as well as support at the organisational level e.g. to improve work environments and cultures.
The Royal Society of Medicine (RSM)	The Royal Society of Medicine provides continuing postgraduate education and learning to the medical profession, with the aim of advancing health, through education and innovation.
Safe, Effective Quality, Occupational Health Service (SEQOHS) accreditation	An accreditation scheme launched in 2010, intended to provide independent recognition that an occupational health service provider has demonstrated competence, as defined by a set of standards, to a team of trained assessors.

The Society of Occupational Medicine (SOM)	The Society of Occupational Medicine is the UK organisation for healthcare professionals working in, or with an interest in, occupational health.
Working age population	For the purposes of this research defined as those aged between 16 and 64 years old.

Abbreviations

COHPA	Commercial Occupational Health Providers Association
CPD	Continuing Professional Development
DWP	Department for Work and Pensions
DHSC	Department of Health and Social Care
FOM	The Faculty of Occupational Medicine
GMC	General Medical Council
GP	General Practitioner
HR	Human Resources
NHS	National Health Service
OH	Occupational Health
RSM	The Royal Society of Medicine
SEQOHS	Safe, Effective, Quality Occupational Health Service
SME	Micro, Small and Medium Enterprise
SOM	Society of Occupational Medicine
WHU	Work and Health Unit

1. Summary

1.1. Overview

This report presents the findings from research commissioned by the Work and Health Unit (WHU), to understand:

- examples of innovative practice in occupational health (OH);
- approaches to developing and maintaining OH knowledge amongst OH providers;
- the challenges and barriers providers face when innovating and maintaining knowledge.

The definition of OH used throughout this research is: advisory and support services which help to maintain and promote employee health and wellbeing. OH services support organisations to achieve these goals by providing direct support and advice to employees and managers, as well as support at the organisational level e.g. to improve work environments and cultures.

1.2. Research context

The Work and Health Unit (WHU) is a UK government unit which brings together officials from the Department for Work and Pensions (DWP) and the Department of Health and Social Care (DHSC) to lead the Government's strategy supporting working age disabled people, and people with long term health conditions enter, and stay in, employment. To enable this, the government aims for more individuals to have access to appropriate and timely OH advice.

Recent research with private providers of occupational health[1] has provided evidence to fill some knowledge gaps about the functioning of the occupational health market, however the government is concerned that low demand for OH services to date, combined with a marketplace where purchasers are often less informed, may also have driven underinvestment in innovation in the market[2]. To explore this, WHU commissioned research into OH provider approaches to innovating and maintaining knowledge.

1.3. Methodology

A total of 15 qualitative interviews with OH providers (13 with private providers, and two with NHS providers that sell OH services commercially) were completed in two

[1] https://www.gov.uk/government/publications/understanding-the-provision-of-occupational-health-and-work-related-musculoskeletal-services
[2] https://www.gov.uk/government/consultations/health-is-everyones-business-proposals-to-reduce-ill-health-related-job-loss/health-is-everyones-business-proposals-to-reduce-ill-health-related-job-loss

phases between February and May 2020, with the final six interviews taking place during the COVID-19 pandemic. Those interviewed were either owners of the business, or senior members of staff (sometimes with clinical roles alongside taking on the day to day running of the business).

11 of the providers interviewed were engaged in innovation, 13 in knowledge development and maintenance (providers could be in one or both of these categories), while 2 were not currently engaged in either. Interviews were completed with a range of sizes of provider that broadly reflected the fact that most OH providers are small-scale employers: 9 micro businesses, 4 small businesses and 1 large business were interviewed.

1.4. Main findings

1.4.1. Approaches to innovation: chapter 3

OH providers tended to focus on innovation in four main areas, with a view to improving their internal processes, and client services and outcomes:

- Software development; for example, updating in-house IT systems, remote services such as online assessments, and app development;
- Policy and procedure development; for example, updating procedures for supporting people with chronic pain or women going through menopause; and reasonable adjustment passports that clients' employees could take with them when moving to new positions or departments;
- Preventative measures; for example, workplace coaches, wellness training and steps to improve stress management and emotional resilience;
- Enhancing employer knowledge of and engagement with OH; for example, educating employers about the potential cost of OH inaction.

The most common triggers for innovation centred on introducing efficiencies (either to the provider's own processes or those of clients) to streamline costs and maintain competitive pricing in the OH market; as well as providing better outcomes to clients. The COVID-19 pandemic did impact innovation somewhat in terms of increasing demand for existing innovative work that was already on offer to employers, such as remote services. However, there was no evidence of it being a trigger for innovation in itself, so far. There appeared to be minimal focus on innovation activity intended to facilitate access to OH services among SMEs and the self-employed, as providers did not consider this a priority or felt unable to increase uptake of services amongst these groups without further government support. Nevertheless, there were some innovations that providers felt SMEs or the self-employed could benefit from.

Most providers approached innovation on an ad-hoc basis, according to staff or business interests or simply when 'good ideas' occurred, rather than having specific innovation structures or procedures in place. There was, however, some evidence of providers using defined processes and procedures after a possible innovation had

been identified, such as the formation of working groups or the development of business cases.

Collaboration when innovating and external (and indeed, internal) evaluations of innovations were rare, due to providers not giving these priority, or due to them lacking the resources to do so.

1.4.2. Challenges and barriers to innovation: chapter 4

Capacity and cost to the business were commonly identified as the main barriers to OH providers innovating, specifically the difficulty of balancing time spent innovating with delivering their day-to-day services – with this sometimes being exacerbated by a shortage of skilled clinicians. The way the OH market operates also fed into this, with some providers referencing competitive pricing and limited customer spends, resulting in an environment in which providers have little capacity to innovate. Few providers viewed management of intellectual property as a barrier to pursuing innovation, as they recognised the benefit of information sharing within their close-knit sector.

While many OH providers shared similar barriers, there was no consensus about the best way to tackle these barriers. Attempts to demonstrate the benefits of investment in innovation, to enable providers to justify time and resource dedicated to innovation, were relatively common. Some providers 'absorbed' the indirect costs by working on innovations in their own time. Those perceiving a lack of demand for OH from (usually SME) employers had tried various approaches to increasing employer knowledge of the benefits of OH, but felt that collective effort in this area, between government, providers and trade bodies, was still required.

Those not innovating were split between those that would like to but faced barriers, and those that felt innovation was not necessary – either because they were satisfied with their existing services, or because they felt their customers were not yet ready for innovative services.

Providers generally struggled to see how external guidance on how to innovate or how to support innovative practice could be helpful in solving the challenges they faced; but a few suggested either funding, or work to address the wider challenges facing the OH sector.

1.4.3. Approaches to developing and maintaining OH knowledge: chapter 5

The most common methods OH providers used to develop and maintain knowledge were training, attending conferences and events, accessing journals and research papers, and informal networking and knowledge sharing. Many providers had a genuine motivation and felt a responsibility to stay up to date in the field, viewing this as a necessary part of providing a high-quality service.

Few providers had specific systems for developing and maintaining knowledge; most just pointed to regular attendance at conferences, keeping up with journals and guidance, and seeking to develop their knowledge as and when needs arose. A few

providers referred to clinical staff keeping up to date with their continuing professional development (CPD) requirements, although this was managed by the individuals themselves.

Engagement with the wider OH sector was commonplace, with a general recognition that keeping in touch with other providers was a valuable practice. This mostly tended to be on an informal basis, likely facilitated by the relatively small size of the OH sector.

1.4.4. Challenges and barriers to developing and maintaining knowledge: chapter 6

Similar to innovation, the main challenge providers faced in developing and maintaining knowledge was balancing this with day-to-day service delivery. This was particularly notable in relation to attending conferences, events and external training as these not only required time away from core activities, but also usually cost money for attendance and travel (the frequency of these events taking place in London causing additional strain for providers based some distance from the capital). A few providers also cited as a barrier the focus within the sector on learning for staff with clinical backgrounds, leaving non-clinical staff with fewer networks and resources to tap into.

Few providers had identified specific ways of overcoming these challenges and barriers. There was a sense that such barriers were inevitable and hard to overcome, although one provider had found it effective to schedule dedicated time for knowledge development into monthly workloads; while another had reduced the expense of conference attendance by offering to speak at them.

Again, providers felt that solutions to the wider challenges facing the OH industry, such as addressing the lack of qualified OH professionals, would be most helpful in overcoming barriers to knowledge development. Providers also suggested financial grants for training and knowledge development; and an opening up of existing networks to non-clinical staff. They noted that regional or local networks and events may be of some benefit too, but these were not without their own challenges.

1.4.5. Conclusions: chapter 7

In conclusion, the research found that:

- **Cost-efficiencies were top of mind in the context of an industry often commissioned based on price:** Improving efficiency was a common theme in innovation, reflecting a sector characterised by limited spending by customers and small profit margins for providers. Although cost-efficiency often triggered innovation activity, it sometimes also inhibited it as providers could not afford to redirect staff away from money-making activities.
- **OH providers were also driven by a desire to provide a high-quality service to their customers:** This commitment to delivering high-quality services that benefitted employers and employees motivated both innovation and the development and maintenance of knowledge.

- **The relatively small size of many OH providers shapes their approach to innovation and knowledge development:** Ad hoc, informal approaches to both innovation and knowledge development appeared to stem from the dominance of sole traders, micro and small businesses within the OH sector.
- **Providers often pointed to support in solving wider issues facing the OH sector as the way to overcome barriers to innovation and knowledge development:** Tackling wider sectoral issues such as lack of SME employer buy-in to OH services, and the shortage of qualified OH professionals were often seen as the key to facilitating innovation and knowledge development.

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2. Introduction

2.1. Background to the research

The Work and Health Unit (WHU) is a UK government unit which brings together officials from the Department for Work and Pensions (DWP) and the Department of Health and Social Care (DHSC) to lead the government's strategy supporting working age disabled people, and people with long term health conditions enter, and stay in, employment. A key goal of the Work and Health Unit (WHU) is to increase employee access to quality occupational health (OH) support. The primary focus is services which provide people with advice about their work capacity to manage sickness absence and prevent health-related job loss.

Recent research with private providers of occupational health[3] has provided evidence to fill some knowledge gaps about the functioning of the occupational health market. However, the government is concerned that low demand for OH services to date, combined with a marketplace where purchasers are often less informed, may also have driven underinvestment in innovation in the market. To explore this, the WHU commissioned qualitative research that aimed to understand:

- Examples of innovative practice currently in the OH market[4], in particular where this facilitates access to OH for micro, small and medium-sized enterprises (SMEs) or self-employed individuals;
- The extent to which OH providers are collaborative when innovating;
- How providers maintain and develop their knowledge in OH;
- The barriers preventing OH providers from innovating and/or maintaining and developing knowledge.

The definition of OH used throughout this research is: advisory and support services which help to maintain and promote employee health and wellbeing. OH services support organisations to achieve these goals by providing direct support and advice to employees and managers, as well as support at the organisational level e.g. to improve work environments and cultures.

The definition of innovation used throughout this research is: investment in new or improved services, delivery methods or technologies that benefit people's health, wellbeing and capacity to work.

[3] https://www.gov.uk/government/publications/understanding-the-provision-of-occupational-health-and-work-related-musculoskeletal-services

[4] To note, as a qualitative piece of research, it did not intend to investigate the prevalence of innovative practice but rather what examples of innovation look like.

2.2 Methodology

A total of 15 qualitative interviews with OH providers (13 with private providers, and 2 with NHS providers that sell OH services commercially) were completed either over the telephone or using Zoom[5]. Fieldwork took place over two phases due to the planned fieldwork coinciding with the COVID-19 pandemic and the start of the UK's period of 'lockdown'. A total of 9 interviews were completed between 19th February and 23rd March 2020, following which the research was paused as it was felt it was not appropriate to ask providers to participate at a time of significant adjustments to day to day life and running of businesses. The research was re-started after a month had passed, although it was decided not to invite any further NHS providers given the stretched nature of their services at that time. A further 6 interviews were completed between 23rd April and 14th May 2020. The same topic guide was used for all interviews (see Appendices).

A starting sample of private OH providers for the research was drawn from three sources to optimise coverage:

- Sample purchased from Market Location, a commercial primary data owner in the UK who independently verify and collect business data;
- Publicly available lists of OH providers who had or were working towards a SEQOHS (Safe, Effective, Quality Occupational Health Service) accreditation[6];
- Publicly available list of OH providers registered with COHPA (the Commercial Occupational Health Providers Association).[7]

NHS OH department contact details were gathered from publicly available data within the NHS Health at Work website.

The screening and interviewing process identified whether each provider was engaged in innovation, maintaining and developing knowledge, or both. Table 1 shows the number of providers interviewed that fell into each category:

Table 1: Number of providers interviewed engaged in innovation and/or knowledge development

Innovating only	Developing and maintaining knowledge only	Both innovating and developing and maintaining knowledge	Neither
0	2	11	2

[5] Although these respondents were interviewed using the video function, only audio recordings of these were stored after each interview took place.
[6] https://www.seqohs.org/
[7] http://cohpa.co.uk/

Interviews were completed with a range of sizes of provider that broadly reflected the fact that most OH providers are small-scale employers. Table *2* shows the number of providers interviewed by size.

Table 2: Number of providers interviewed by size

Sole traders	1-9 employees	10-49 employees	249-500 employees
3	6	5	1

Those interviewed were either owners of the business, or senior members of staff (sometimes with clinical roles alongside taking on the day to day running of the business).

2.3 Analysis

This report is based on qualitative analysis, which is intended to understand individuals' views in depth and detail, rather than to be 'representative' or measure the incidence of these views. Findings from each interview were written up into a thematic framework, organised according to research objectives and topics covered in the interviews. This allowed analysis to establish key themes that emerged across multiple interviews.

When describing the qualitative results, the terms 'many', 'some' or 'a few' are sometimes used to give a relative indication of the extent to which views were expressed. The term 'many' is used to mean that a view or behaviour was fairly widespread within a particular group of individuals; while, at the other extreme, 'few' indicates that a finding applied only to a small handful. 'Some' is used to indicate a middle-ground between 'many' and 'few'.

3. Approaches to innovation

This chapter explores the following among OH providers involved in innovation:[8]

- Examples of the ways in which OH providers innovate, and the triggers for these (Section 3.1);
- The processes and procedures used (Section 3.2);
- The extent to which OH providers collaborate (Section 3.3);
- The extent to which OH providers evaluate their innovation (Section 3.4)

3.1. Ways in which OH providers innovate

OH providers were asked to describe examples of ways in which they had been innovating around their OH services. The definition of innovation used in this research is: investment in new or improved services, delivery methods or technologies that benefit people's health, wellbeing and capacity to work.

Overall, innovations were introduced with a view to improve upon providers' own internal processes and to optimise client services and outcomes. These were driven by the provider (and not directly by clients, although client requests or needs could inspire innovation indirectly), and were underpinned by a focus on bringing technology to the fore, to modernise the sector and maintain a competitive edge in the market.

"I think everyone's got a phone in their pocket and things like apps and stuff are potentially the way forward. Essentially we're looking at how we can use technology to drive occupational health." (Private provider, 10-49 employees)

In essence, viewing technological developments as an opportunity was the trigger for innovation here. Other triggers were simply related to responding to client needs, a desire to make a difference to clients and their employees, and ultimately to reduce sickness absence. One provider also talked about the opportunities for innovation that came with a change in management and another about being inspired to make changes after first-hand experience of clients' inefficiencies.

OH providers tended to focus on innovation in four main areas:

- Software development;
- Policy and procedure development;
- Prevention, predominantly with regards to wellbeing and mental health; and
- Knowledge and engagement among clients and their employees.

[8] Throughout the chapter, the term 'OH providers' refers to those who have engaged in innovation, unless otherwise specified.

3.1.1. Software development

Examples of software development innovations
Many OH providers cited technological innovations, although these encompassed a varied range of specific examples. For example, one mentioned updating in-house IT systems for faster turnaround of management reports, while others outlined enhancements to remote services and the use of online databases, portals and apps.

With regards to **remote services**, one OH provider cited upgrades to their health surveillance software which enabled them to collect and analyse a vast amount of data in a single appointment. This meant there was less need for follow-up visits, which resulted in less travel time for the provider and a streamlined client experience. This was particularly pertinent for this provider, as their client-base of oil and gas companies involved a relatively large geographical spread, often in remote locations.

"We take on site everything that we need to complete the health surveillance and that's a technician and a doctor, i.e. me and my manager, along with a piece of software where we record everything. At this point we can determine whether or not it requires follow up, there and then." (Private provider, 1-9 employees)

Other providers were looking to take OH assessments online, using software such as the NHS video-conferencing system Livi; a remote diagnostic telemedicine tool connected to mobile telephones; and a video-based appointments system called Attend Anywhere.

"Using the telemedicine software [employees] can put a sensor on [their] finger, put that into [their] iPhone, record [their] pulse and send on [to us]." (Private provider, 10-49 employees)

"We have started using a video calling referral/outpatient system whereby people sit in a virtual waiting room, and the nurse effectively runs a clinic without leaving her office." (NHS provider, 10-49 employees)

The OH provider who referenced Attend Anywhere also mentioned looking into a new portal for online management referrals, as well as a remote physiotherapy service, based around telephone assessments. With this system, face-to-face contact would only be required in cases of little or no improvement to the employee's work-related health issue.

"The online management referral system has saved us a lot of admin time, because most of the work is done online and we don't require letters to be typed… The remote physiotherapy service would involve a telephone assessment, then the patient would be provided with advice, videos demonstrating exercises etc. We would only follow up with a physical exam if they showed no improvement by the next telephone consultation." (NHS provider, 10-49 employees)

Another provider referenced an app that facilitated direct engagement with employees, who may have concerns about their health whilst at work or prior to returning to work after a period of sickness.

“We can have one of our nurses or health coaches support them online in real time and direct them to resources…normally people only get a review after 4 or 6 weeks after going to a clinic, so having real-time data will enable [clients] to provide an 'in-house' service to [their employees].” (Private provider, 50-249 employees)

Overall, these remote services tended to enable providers to check in with or gather data from clients’ employees in a more flexible and convenient manner, in order to better target their OH support.

Remote services aside, some providers cited using **software for administrative, analytical and educational purposes**. Examples included online databases, portals and apps. Some of these were ‘off the shelf’ while others were bespoke:

- **Administrative functions:** one provider referenced a database for storing provider-staff appointment schedules, along with associated correspondence and notes. Similar to this is an app called My Cohort. This has some cross over with remote services, but with a greater focus on administrative support and self-management. One function of My Cohort is to outline dates for onsite clinic appointments, so that individuals can go in and book an appointment to suit their own schedule, for example. These innovations aim to improve the customer experience by adding convenience.
- **Analytical features:** client-facing dashboards which enable employers to analyse statistics and look for trends among their employees, for example. One provider mentioned that clients could engage with the system directly and request modifications or additional services if desired. Another mentioned a bespoke tablet app that could produce instant reports for client management. An example of this is the app Calm, which can be used to produce reports on things like nutrition and alcohol intake. It can also be used for stress audits, which look to assess stress levels but also trace the source. The previously cited app for facilitating direct employee engagement is also aimed at providing clients with data on the journey of people returning to work after long term health problems, which the provider explained is not currently available in the sector.
- **Educational purposes:** Examples here tended to be e-learning portals or apps, although one provider mentioned an interactive section on their website. These were aimed at both employers and employees, assisting them in learning about their conditions / the conditions of their staff and the associated impacts and support needs.

  “Staff can go on and learn about their condition and the impact it has on their work ... it is also for the employer, providing them with information about the condition, what's expected of them and what might be needed to support the employee." (Private provider, 1-9 employees)

Triggers for software development innovations

Most of the triggers for technological innovation were about modernising the sector and staying ahead of the curve. One provider talked about losing a tender to a competitor who was able to offer remote services, for example. Another talked about

building some software that allowed for in-house efficiencies but also gave them a product that they could go on to sell.

Providers were also motivated to innovate by the goal of introducing efficiencies in their own operations as well as within their clients' businesses. The focus here was on streamlining staff time as well as direct monetary costs. This was seen in the provision of administrative support along with the facilitation of remote services, direct provider-staff communication, real-time data and expedited reporting. Related to this, another provider talked about budgetary pressures within the NHS and the need to constantly find and cultivate efficiencies.

"The more flexible we can be in delivering our services, the more appealing we are to customers. Taking people off a site is costly. Typically, if you went to see the doctors, you'd need a half day off." (Private provider, 10-49 employees)

"Probably we're behind the curve in some respects, we've found a lot of our competitors in the private sector have very much online offers ...I suppose the key driving factor in the NHS is that we're all subject to cost-improvement programmes where we're required to find budget cuts year on year." (NHS provider, 10-49 employees)

On a slightly different note, one provider explained that the introduction of GDPR caused them to look into ways they could use valuable data without compromising anonymity. Learning portals enabled them to educate the employer without concerns about personal information, for example; line managers could read about relevant conditions, understand potential signals and how to deal with them at work, without needing to know the details of who has been diagnosed.

"They can go on and read more in depth about the bowel condition because it was generic and not really for that person individually ... so you're giving information without breaching confidence." (Private provider, 1-9 employees)

This provider also explained that they had decided to develop a digital database after being engaged by a national client who was still using paper records, and thus experiencing the difficulties this presented first-hand.

"*They had* six *cabinets full of 2,500 employee records. We were struggling to pull stats and charge the client appropriately and wasting a lot of time with spreadsheets, etc."* (Private provider, 1-9 employees)

3.1.2. Policy and procedure development

Examples of policy and procedure innovations
Some OH providers referenced formulating new policies and procedures, or adapting existing ones. Examples here were often specific, and covered a broad range of areas. One provider detailed innovations related to menopause and chronic pain, for example.

The procedures and guidance around supporting women going through menopause focused on raising awareness and providing a framework for workplace support. The procedures around chronic pain were aimed at introducing advisory services, with the

procedural element more focused on self-management. This was with a view to reducing the levels of clients ‘bouncing back’ with recurring problems.

Broader examples in this area included reasonable adjustment passports, which clients’ employees could take with them to new positions or departments; driving forward quality by working to the Safe, Effective, Quality Occupational Health Service (SEQOHS) and ISO9001 standards; and the creation of an ‘Employee Fleet’ of company cars. This fleet allowed the formation of a team of OH provider staff especially with the ability to travel and deliver OH services such as driver medicals at client sites, and as such increase the ease of access to these services. A final example was a move to a paperless operation. This was geared towards facilitating remote working; a decision that was not directly motivated by the COVID-19 pandemic, but something the provider was looking to do regardless.

Triggers for policy and procedure innovations
The creation and adaptation of existing policies and procedures was also about introducing efficiencies in service and provider operations. This trigger was present in the development of procedures to facilitate self-referral and those to prevent cases of chronic pain ‘bouncing back’ to the provider, for example. Another noted the potential time savings in deploying the carefully cultivated employer fleet, as an innovation trigger.

In a different vein, procedures introduced around chronic pain were instigated by the Health Innovation Network, who approached the provider about collaborating, while working towards quality standards SEQOHS and ISO9001. This was an example of providers motivated to innovate by the goal of ensuring optimal service delivery.

"I am a doctor and I believe in giving quality services, you cannot do half measures." (Private provider, 1-9 employees)

3.1.3. Preventative measures

Examples of innovations around preventative measures
Some providers mentioned measures aimed at preventing and reducing cases of poor mental health and/or wellbeing. A few explained that this often involved encouraging employers to look beyond the legal requirements, which are currently less focused on such issues. Examples include workplace coaches and wellness training and a focus on emotional resilience and stress management. One provider explained their recently introduced offer of one-on-one sessions with a trained counsellor and life coach:

“The way we deliver our clinical services, we try and be very early intervention, proactive and preventive ... It's not training, it's not counselling, it's one to one. Almost like workplace coaching.” (Private provider, 10-49 employees)

Triggers for innovations around preventative measures
Preventative measures were triggered by a desire amongst providers to introduce efficiencies by pre-empting cases of poor wellbeing or mental health, particularly those resulting in long-term sickness leave. One provider explained that many referrals in this sphere were often not suitable, leaving people with long waiting times

within the NHS for a service that ultimately was not quite appropriate. They argued the best thing for employees is OH support that aims to prevent the need for sick leave in the first instance:

"By the time someone is off sick, it's already too late, and it's just trying to look after employees, really, look after employees' wellbeing, and prevent those long-term sickness things and, you know, early intervention is key." (Private provider, 10-49 employees)

3.1.4. Enhancing knowledge and engagement of employers and their employees

Examples of innovations around enhancing knowledge and engagement
A few providers talked about a desire to address knowledge and engagement gaps amongst employers and their employees. E-learning portals were key here, as well as a focus on attitudinal change. This was about steering employers away from seeing OH as 'a necessary evil' or doing the legal minimum, and encouraging them to refocus on what employees actually need or want. One provider also mentioned the simple sharing of information on the benefits of OH more widely, while another focused on showing employers the potential cost of inaction.

"We're trying to do a lot of stuff that engages the employees... such as the use of forums or e-learning portals." (Private provider, 1-9 employees)

"We look at educating the employer as to why they should use occupational health and what they can get out of it…With some clients we felt like they were looking for an answer for what they wanted, as opposed to an answer for the employee." (Private provider, 1-9 employees)

"We use an interactive tool which helps employers to identify how not acting could be costing their business." (Private provider, sole trader)

Triggers for innovations around enhancing knowledge and engagement
The desire to make a difference and provide a high-quality service is predominantly what drove measures to enhance engagement and knowledge among employers and employees. One provider noted the stark differences in impact in terms of benefits to employees when working with an engaged employer compared to the less-engaged. Another provider correlated employer engagement with OH with enhanced productivity.

"A lot of people just do the minimum whereas we're always trying to go above and beyond… it's trying to give the overall service to the end user." (Private provider, 10-49 employees)

"OH does not have a responsibility to care for employees but it does have a unique opportunity to interact, comment and advise patients and thereby make a difference." (Private provider, 1-9 employees)

3.1.5. COVID-19 as a trigger for innovation

A few providers interviewed during the pandemic noted the impact of COVID-19. One provider talked about a greater focus on case and stress management, while another mentioned heightened market demand for digital services. A third provider expected that they would be issuing a lot more advice around returning to work, but explained that this was not an innovation as such, more of an adjustment in terms of the sort of work that was being commissioned.

"We introduce digital services…one because the market demands it, especially due to COVID-19, and one because we will demand it of the market." (Private provider, 10-49 employees)

"We will be doing a lot of return to work advice because of COVID, looking at whether employees with health problems are safe to come in, testing or temperature checks in the workplace etc. This isn't really an innovation though, just an adjustment." (Private provider, 249-500 employees)

These are not innovations that can be attributed to the pandemic, however, as these were services that were already in development or on offer previously; the pandemic simply increased demand for them (mainly, employers' requests centred on digital referrals, advice on adjusting the workplace for social distancing, and advice on adjustments staff would need to enable them to work from home). It is worth noting that, given the timing of fieldwork, it is possible that new innovations have been triggered by the pandemic since the time of interview.

Extent to which innovations have the potential to benefit SMEs and self-employed individuals

Previous research for WHU among OH providers indicated that SMEs and self-employed individuals were less likely to access OH.[9] Providers were therefore asked to comment on whether their innovations had the potential to benefit these groups.

For the most part, there appeared to be minimal focus on innovations being intended to benefit SMEs and the self-employed. Where this did occur, it tended to be as a by-product rather than an intended consequence.

One provider explained that while innovations were not specifically designed to benefit or increase commissioning amongst SMEs or the self-employed, this was not to say that they could not benefit from them (but those would be the same benefits as for the larger employers). Another talked about innovating with employers of a range of different sizes in mind, thereby covering SMEs by default. Similarly, a couple of providers explained they were working solely with SMEs and thus automatically addressed the requirements of such businesses. These providers chose to only work with SMEs due to them being sole traders themselves, who felt that the scale of what they could deliver was only applicable to SMEs, rather than choosing to benefit SMEs over larger businesses.

[9] https://www.gov.uk/government/publications/understanding-the-provision-of-occupational-health-and-work-related-musculoskeletal-services

Cost of OH services was mentioned as a factor in lower uptake levels among SMEs. For example, one provider explained that SMEs were often unable to bear or justify the upfront costs of their innovative system designed to streamline services, despite the potential for longer-term savings. In a bid to address this, a couple of providers mentioned offsetting costs for SMEs against income generated by their larger clients.

"The system is probably more cost effective, because of how much they are able to cover in one day, so yes it could help SMEs/self-employed, but because the initial cost looks more expensive it can be off-putting." (Private provider, 1-9 employees)

"We have a wide tiering structure for pricing which enables smaller companies and self-employed to buy some services … ad-hoc. If I can, I will build in the extra learning portal using profits from larger contracts to offset the costs to smaller employers." (Private provider, 1-9 employees)

Another provider explained that the lack of engagement from SMEs was about limited awareness and knowledge of the benefits of OH. This provider suggested there was a need for a government push if this were to change.

"We need the government to make a strong case to SMEs to increase uptake of OH." (Private provider, 249-500 employees)

Another option may be to focus innovations on more scalable technologies, that could be adjusted according to the size and budget of the commissioning employer. One provider talked about this being a reason for going for the database system they used.

"The flexibility/scalability of the system was part of the reason we chose it when setting up the business, as we were unsure what kind of customer [we] would get." (Private provider, 10-49 employees)

3.2. Processes, procedures and associated resource

A few providers reported that they have specific structures in place for the purpose of generating ideas related to innovation in OH: one explained that they have an OH physician who keeps them up to date with changes in the industry, as well as new legislation, and another mentioned referring to SEQOHS and ISO9001 as a means to identify areas of focus.

In the main however, ideas tended to emerge on an ad-hoc basis, according to individual staff interests, their experiences or the business needs. Ideas sometimes emerge organically, sometimes as a result of conversations in wider meetings or working groups.

"We don't have a formal way of coming up with new ideas. These can come from anywhere." (Private provider, 249-500 employees)

"When I joined the business, I was aware of technological innovations from elsewhere that weren't in place here. So I conducted a review of the whole service, then of the business case being prepared." (NHS provider, 10-49 employees)

There was, however, evidence of more defined processes and procedures in place *after* a possible innovation has been identified. A new idea may lead to the formation of a working group and/or the development of a business case for the board, for example. A few of the smaller providers explained that, owing to their size, there was less need for this more formal second step, however.

"Once we have decided that something is a good idea/worth following up on, we will pull together a project team to develop it." (Private provider, 249-500 employees)

"As a smaller business, most decisions are down to me and my director. Because of this, we can be more flexible and get things done quicker; there's no long approvals process or a need to go through lots of channels." (Private provider, 10-49 employees)

In a similar vein, providers rarely had specific budgets set aside to drive forward innovation. Instead, it tended to come from the board, trustees and/or be drawn from the wider business budget, as and when required. A couple also mentioned that they would reinvest their profits into innovation where relevant; one of these was an NHS provider who described using income generated through their commercial services. This made it easier for them to get the necessary approval from the Trust to take the innovation forward. There was one case in which the provider had a specific innovation budget set aside via a loan for a new clinic they were due to move into, but this was likely to be a one-off situation relating to the move.

3.3. Extent of collaboration

Collaboration with external organisations when innovating was rare. Indeed, many providers could not identify partners that they would like to collaborate with, suggesting on the whole it is simply not a priority for providers. In addition, a couple pointed to commercial reasons for this, with providers reluctant to support their competition. Another mentioned they had little crossover in terms of areas of interest.

"They don't have a desire to do the sort of stuff we do ... that level of service." (Private provider, 1-9 employees)

There were a few examples to the contrary, however. As previously noted, one provider was approached by the Health and Innovation Network with a fully formed idea that needed putting into practice. This same provider also mentioned collaborating with a research team at a nearby hospital, piloting two separate innovations. Others talked about working with relevant software developers on their technological innovations. One of these providers mentioned an open-forum feature of the Cohort software. Through this portal, companies can put forward ideas or suggestions for software development, which others can then vote on. Particularly popular ideas can then be prioritised by the developers.

Providers who could think of examples of potential collaborators made a range of suggestions; from organisations or individuals with evaluation expertise to Human Resources (HR) teams, other successful OH providers and – in the case of one NHS provider – other NHS trusts.

3.4. Evaluation of innovation

Evaluation activities were also limited, with only one example of external, formal evaluation in place. This was the provider who collaborated with the Health and Innovation Network, with the latter conducting a formal evaluation of their chronic pain pilot. A few mentioned other activities, which were much more internally driven. One provider explained that they do measure performance against agreed Key Performance Indicators (KPIs), while others mentioned working with client and staff feedback. In some cases, this was received on an ad-hoc basis, in others, they had specific surveys or feedback mechanisms in place.

Providers who did not evaluate, or did so only informally or to a limited extent, chose not to do so either because they felt it was not necessary as they felt they only took forward ideas that were worth doing, or because they did not feel they had the resources to carry out more formal or ambitious evaluation work. One provider noted that they would like to be able to do more evaluation, but did not feel that it was possible for them at the moment due to limited time and resources:

"It's something that we probably should do, but time [is difficult]." (Private provider, 10-49 employees)

4. Challenges and barriers to innovation

This chapter explores the following among OH providers:

- The challenges and barriers faced (Section 4.1);
- Examples of attempts to overcome these challenges and barriers (Section4.2);
- The extent to which those not currently engaged in innovation would like to be (Section 4.3);
- External support providers would find useful (Section 4.4).

4.1. Challenges and barriers faced

The research investigated whether the following elements could be barriers to OH providers looking to innovate:

1. Capacity of providers;
2. Cost to providers, as adopting new technology is expensive;
3. Management of intellectual property;
4. The operation of the OH market, i.e. the tendency for commissioning of OH services to be based on price not quality.

The interviews covered these potential barriers specifically, and also other challenges and barriers raised by providers.

OH providers faced a range of different challenges when looking to innovate. While capacity and cost to the business were commonly experienced as barriers (and frequently described as the main barrier to innovating), the way the OH market operates (i.e. the tendency for commissioning to be based on price not quality) was also perceived as a hindrance. Conversely, very few providers felt that management of intellectual property prevented them from innovating.

In addition to the common barriers of cost and capacity, it was clear that many providers approached innovation in a reactive way, by responding to the demands of their customers rather than proactively seeking new ways to offer their services or improve their efficiency. This echoes the findings from previous research which highlighted a reactive approach among NHS providers.[10]

[10] https://www.gov.uk/government/publications/understanding-the-provision-of-occupational-health-and-work-related-musculoskeletal-services

Capacity

As anticipated, capacity was a common barrier for OH providers looking to innovate. Almost all providers spoke in some sense of the difficulty of balancing time spent innovating with delivering their day-to-day services – and for many, this was described as the main challenge they faced.

Several explicitly acknowledged that fully developing new ideas into a product or service ready to take to market requires a substantial investment of effort and resources. Those currently innovating generally recognised that this investment could pay dividends in the long run; however, at the same time they emphasised that delivery of day-to-day business needed to take priority. Those approaching innovation in a more formal, structured way (and looking to formally evaluate the success of their innovations) were even more wary about the time and resource investment required to bring an innovation to market, compared to those who approached it more casually.

The consensus among providers, therefore, was that the emphasis fell firmly on delivery of day-to-day business, with innovation perceived as a 'nice-to-have'. Providers explained that their contracts to deliver work usually contained Key Performance Indicators (KPIs) and that their priority was meeting these. This was particularly keenly felt by smaller OH providers, who reported struggling to divert time away from delivery.

"At the same time as you are running the company, which is taking up most of your time, finding time to look at innovation is challenging because, as we all know, 'time is money' [...] and when you have got people asking to do this, that and the next, you [can't] say 'sorry I can't, I am busy innovating'." (Private provider, 1-9 employees)

A few providers stated that input from clinical staff was vital for successful innovation and that they had seen anecdotal evidence of innovations failing where they had not sought this clinical expertise – yet securing time from clinical staff for innovation work on top of them delivering services was particularly difficult.

"If we're using nurses or doctors, as much as we would like to sit down and have longer meetings and discuss things that are changing, when we're doing that they could be out earning money for the company." (Private provider, 10-49 employees)

This was compounded by the recruitment difficulties in the OH field identified in previous research.[11] Several providers spoke of the challenge of recruiting sufficient skilled clinical professionals to deliver contracts or to grow their business – making it more difficult still to find time to involve clinical staff in innovation activity.

[11] Previous research found that: "The job roles which providers most struggled to recruit for were relatively specialised roles, and broadly mirror the job roles which providers had vacancies in: nurses with a SCPHN [Specialist Community Public Health Nursing] OH qualification (51% found it difficult, compared with 6% who found it easy), nurses with other OH qualifications (41% found it difficult, compared with 8% who found it easy), and OHPs [occupational health physicians] (37% found it difficult, compared with 8% who found it easy)." https://www.gov.uk/government/publications/understanding-the-provision-of-occupational-health-and-work-related-musculoskeletal-services

Cost

Cost was frequently described as a barrier to innovation. This was sometimes seen in terms of the upfront investment required, such as for new IT solutions or equipment to enable wider geographical delivery, for example. Upfront cost was a particular barrier for a few of the smaller OH providers, who emphasised the occasional 'hand to mouth' status of their business finances; a situation which was exacerbated by the tendency of their clients to make late payments for services. One provider also explained that their charitable status meant they were subject to financial restrictions which made it difficult to invest in innovation.

However, it was the indirect costs related to capacity and resourcing (described above) which were perceived as the greater barrier; providers were reluctant to divert staff away from 'money-making' activities, as this represented a critical loss of income for their business. Some spoke about this having become more pressing in the context of COVID-19; the pandemic and lockdown had prevented them from offering a full service or caused them to lose contracts, resulting in additional financial strain being placed upon their business.

Intellectual property

Few providers felt that management of intellectual property was a barrier to pursuing innovation, and in fact – despite the reluctance of a few providers to collaborate on innovation due to a desire not to 'support the competition' – several mentioned that they saw sharing of knowledge as a positive, in that shared knowledge can benefit more employers and employees. A willingness to share knowledge may be due to the fact that occupational health providers often work closely, sub-contracting from the same pool of professionals,[12] and so are more used to sharing working practices compared with other sectors.

However, one of the larger OH providers with a more corporate outlook, did caution about there being a need for better intellectual copyright agreements to be in place.

"[OH providers] are not well trained in Business and Economics ... in having good agreements about intellectual property and trusting each other ... there's often not a lot of trust." (Private provider, 50 to 240 employees)

The OH market

Related to capacity, several providers mentioned having to price their services competitively and either winning work with very low profit margins or losing contracts to other providers based on price. This was attributed to stiff competition in the market and customers, especially (but not only) the smaller employers, being limited in their spend. This has resulted in an environment where providers are necessarily focusing resource on delivering contracts with little capacity to innovate.

"The market is still very small. You need a lot of customers with a lot of people to make it work ... [name of large OH provider] turns over £15 million but have tens of

[12] https://www.gov.uk/government/publications/understanding-the-provision-of-occupational-health-and-work-related-musculoskeletal-services

thousands of people on their books through thousands of different companies. It's a low cost, low margin market." (Private provider, 10 to 49 employees)

A reactive approach
Many OH providers also spoke of a lack of demand for new services from their customers, with customers preferring to stick to the services already in place. Those working with SMEs described a lack of understanding of OH among these employers, and the tendency therefore to see it as a cost rather than a benefit, resulting in doing the 'bare minimum' to meet their legal duties regarding employee health. Some providers had met with resistance from the HR managers or Finance departments of their clients when they have tried to encourage them to invest more in OH, while others had had positive conversations with SMEs about innovative services, but these discussions had ultimately come to nothing because of a lack of budget. A provider working to supply OH services to the NHS had encountered a similar challenge relating to budget restrictions and the mentality of senior staff in client organisations.

Culture/attitude
A couple of OH providers spoke of finding it difficult to innovate because of an internal workplace culture whereby management or staff were resistant to change. One sole trader was also reluctant to innovate as she did not see it as being within her skillset to do so.

4.2. Overcoming challenges and barriers

While many OH providers shared similar barriers, there was no consensus about the best way to tackle these barriers. Instead providers suggested a diverse set of strategies, while a few providers struggled to think of any ways of overcoming the barriers they faced.

Given that many providers perceived a financial risk associated with innovation and found it difficult to justify spending time on activities that were not 'money-making', exploring ways to **demonstrate the benefits of investment in innovation** was a relatively common suggestion. A couple of providers were doing this via formal evaluation. For example, one spoke of trialling a pilot programme which had enabled them to collect evidence of how the new service was working on a small scale; this then meant that they could justify more large-scale investment in the idea. However, this kind of evaluation may not be possible for many providers, given the limitations they encounter around evaluation (see Section 3.4).

Others had mapped out expected return on investment before making an upfront investment:

"Sometimes you've got to spend to grow. We can grow it as we want so it was a finance outlay that we felt was a productive one and we'd try and include it in our prices in the tiering system ... We hope in the next 5 years [the database] ends up paying for itself." (Private provider, 1-9 employees)

One provider wanted to be sure of return on investment and had therefore made efforts to canvass interest among their customers and to secure buy-in to a product before making a financial decision. This had sometimes led to them avoiding investing in ideas.

"If we were bigger we could say, well, actually, we can buy that and sell it whereas at the moment we're kind of doing it the other way; we're trying to sell it to people in order to get the interest to then purchase." (Private provider, 1-9 employees)

Some providers, however, were more casual and described trying new things 'if they felt they would work' but without formal evaluation. Some respondents[13] 'absorbed' the indirect costs by resorting to working on innovation in their own time.

Providers had also taken action to **minimise the financial risk associated with upfront investment** – though this appeared to be more straightforward for larger OH providers, whose size meant more options were available. This included partnering with the company building their app and database to keep costs down, obtaining business loans, and ensuring a healthy cash flow by diversifying their services (for example, by providing 'niche' services to specific industries that not many others providers offered).

Those perceiving a lack of demand for innovation from their (usually SME employer) client base had attempted a number of things to **encourage buy-in from their (SME) clients**: from holding conversations to try and persuade staff of the benefits of OH in general and new services in particular; providing training on preventative and wellbeing measures, including an interactive tool for employers to identify how OH could help them; and contributing to a government White Paper regarding raising employer awareness of OH. It was clear from the interviews, however, that this was an area where most OH providers felt that more work needed to be done – and where a collective effort between government, providers and trade bodies would be most effective.

To counter challenges around staff (both provider and client) being resistant to change, one provider had used **training to upskill staff** (e.g. in using a new IT system). This had been made possible by a change in management leading to an overhaul in processes. However, other providers were struggling to overcome a resistant workplace culture and the sole trader experiencing a personal lack of confidence had not tried anything.

4.3. Extent to which those not currently innovating would like to

Among the few providers not currently innovating, there was a split between those that do not innovate because they do not see the need and those that would like to innovate. Those that would like to innovate wanted to do so to improve the services

[13] Those interviewed were either owners of the business, or senior members of staff.

that they offer and ultimately the outcomes for employees, but faced unique challenges that were not possible to overcome at the time of interview (for example, being tied to a specific/limited client-base and associated contract).

Those that do not see the need for innovating tended to be smaller OH providers (sole traders or those with a handful of employees) working with SMEs. These providers felt that their current offer of services was adequate for their customers' needs and that 'traditional' services worked. One provider felt that employers need 'basic' coverage before they are ready for new services, and as they believed many employers did not yet have these 'basic' services in place this had led them to adhere to more traditional ways of working.

4.4. External support providers would find useful in overcoming challenges and barriers

Providers generally struggled to see how further guidance specifically on how to innovate or support innovative practice could be helpful in solving the challenges they faced. A few felt that **government funding** would be most useful if it went directly to OH providers specifically for funding upfront investment in innovation, while another provider wanted funding to go towards specialist evaluation support.

Where they were able to identify support needs, often this related to wider challenges faced by the OH sector.

Several providers felt that the main area where support would be helpful was in **encouraging access to OH among (SME) employers**, by raising their awareness of OH and/or supporting these employers financially in using OH services. They suggested that this could take the form of government subsidies or grants for smaller employers to access OH. One provider was aware that there was already a government initiative that had allowed small businesses to access OH for free but was not convinced that this had made a tangible impact.

Some mentioned that **stimulating the supply of OH professionals** to the labour market would be most useful in addressing the recruitment challenges they faced. This would allow them to feel reassured that they had the capacity to both deliver services and innovate.

5. Approaches to developing and maintaining OH knowledge

This chapter explores the following among OH providers involved in developing and maintaining their knowledge of OH:[14]

- Examples of the ways in which OH providers develop and maintain their knowledge (Section 5.1);
- The extent to which OH providers have systems in place for knowledge development (Section 5.2);
- The extent to which OH providers engage with the wider OH sector (Section 5.3).

5.1. Ways in which OH providers develop and maintain knowledge

The most common methods OH providers used to develop and maintain knowledge were training, attending conferences and events, accessing journals and research papers, and networking and knowledge sharing.

Training courses were the most commonly used method, with a number of providers specifically relating this to the continuing professional development (CPD) requirements of the clinical practitioners within their organisation. For example, one private provider explained that they reviewed evidence of CPD as part of the annual appraisal process for doctors, in line with the requirements of the General Medical Council (GMC) that they undertake a specified amount per year. A sole trader described staying on top of CPD requirements as one of the main motivations for training, as they have to demonstrate what they have done to meet this requirement.

Others discussed training courses for a wider group of staff, such as ensuring training is kept up to date to maintain their organisation's SEQOHS (Safe Effective Quality Occupational Health Service) accreditation. One larger provider had invested in specialist training to enable staff to specialise in certain areas rather than taking on a more 'generalist' role something they felt was uncommon in OH. They had brought in external experts to train staff, alongside internal training, as they felt external input was necessary for them to be learning as much as possible. They also updated training objectives annually in line with the business strategy, i.e. the training

[14] Throughout the chapter, the term 'OH providers' refers to those who have engaged in developing and maintaining knowledge, unless otherwise specified.

coverage was shaped by business priorities, which in turn were influenced by client demand. Another provider gave refresher courses in Respiratory Health Surveillance to all staff, as part of their commitment to improved services and employee development. The introduction of new systems sometimes prompted training, with one large provider delivering training to all staff on use of a new consultation app that they had added to their service offering.

Many providers also attended **conferences or other events** in order to enhance their knowledge of OH. Examples of conferences and events included the national meeting of the Society of Occupational Medicine (SOM), the Association of Occupational Health Practitioners conference, the Society of Occupational Nursing conference and the British Occupational Hygiene Society conference. A couple of providers mentioned attending webinars as well as the more traditional in-person conferences, indicating that some of the benefit of these types of events could be gained without being there in person.

Providers that attended these conferences or events did so because they found it a useful way of keeping up to date with developments in the field. Some who attended events noted the networking opportunities they presented, allowing them to share and receive knowledge from others in the OH field in a more informal capacity.

In fact, many respondents found **networking or knowledge sharing with colleagues outside of their organisation** a key part of developing and maintaining knowledge. Whilst some providers primarily achieved this through events, a few used online approaches, such as dedicated forums or groups set up on social media. A few reported using the email-based Jisc OH discussion forum, through which other providers, practitioners and academics respond to queries, while another mentioned they made use of a Facebook forum set up for OH knowledge sharing. One of the users of the Jisc forum felt it was helpful for their knowledge of the sector in general, as well as particular queries:

"It gives you the picture of things that have been brought up - highlights an area of interest or new areas." (Private provider, 1-9 employees)

Other providers mentioned membership of established networks. One provider had previously held a position on the NHS Health at Work network, and they were also a member of regional networks where they meet with other individuals from across different trusts.

A number of others achieved networking through the more casual means of speaking to contacts they had built up within the field – as one provider put it, ‘the grapevine’ – on an ad-hoc basis. This was usually done by speaking over the phone or via email when they need advice, find an interesting article, or have a learning experience they want to share.

A few providers reported being members of small groups that meet with the express purpose of sharing knowledge and experiences. One example of this was a group mostly comprised of OH nurses, but from a mixture of working environments including self-employment, the NHS and private providers. The provider that gave this example felt sharing experiences in this way resulted in improved practice:

"I think sharing experiences, obviously sharing knowledge, examples, scenarios. Sometimes somebody might have a question and actually…even though it's not you that has asked the question it will then make you think about that, maybe question your own practice, are you doing things the best way possible, has anybody come up with anything else." (Private provider, Sole trader)

The sole traders interviewed mostly attended local OH groups, which was not mentioned by most other providers. One said their group was mainly attended by OH nurses, but from a mixture of employment types, including the NHS, private providers, and those who are self-employed. This perhaps indicates that this means of knowledge sharing is particularly valuable for this type of provider, a perception explicitly stated by one of the sole traders interviewed.

The NHS providers interviewed also made use of regular knowledge sharing meetings, this time internally within their organisation. One explained that their ‘governance meeting’, held once a month, took account of new legislation, complaints and compliments, SEQOHS standards, risk management and other types of guidance:

“So we get the whole team, the clinical team, together once a month to go through any new processes, any new legislation, any research that’s pertinent, and also cases of concern. So we have a session at the end of it where we look at individual cases … as a team so that we can all feed into it as clinical supervision.” (NHS provider, 10-49 employees)

The provider also said that the discussion and learnings from these meetings would feed into innovation, as this is where new ideas may emerge or be introduced to others. They felt having a regular meeting had benefits to teamwork as well as advancing knowledge:

“I just think it makes sure that we work better as a team. Everyone has input, everyone’s a valued member of the team, and [it] actually makes sure that people do get that knowledge shared rather than putting the onus on the individual.” (NHS provider, 10-49 employees)

The other NHS provider also pointed out additional benefits to regular knowledge-sharing meetings; they argued that there were benefits to staff morale and confidence, team building, and staff retention, as well as improving the quality of service and developing their offer. They described a variety of different meetings including complex case meetings, team meetings and clinical governance meetings where knowledge is shared, as well as research working groups for those with particular interests.

In addition, they also mentioned a ‘journal club’, where members read academic research and present it back to the rest of the club for discussion, including how the findings could be applied to current practice. The provider has, on occasion, had to justify the time spent on these activities to senior management, and has done so by arguing that SEQOHS accreditation requires a certain amount of time be spent on learning, though they themselves believe there are other benefits, as noted above.

It was only the NHS providers that made use of regular internal learning meetings, despite some of the other providers being of a similar size or larger, suggesting perhaps that the structure or culture of the NHS facilitates or encourages such methods.

A number of providers mentioned **subscriptions to journals**, and using these to maintain their knowledge of developments in OH. A few of these cited Occupational Medicine, the SOM journal occasionally referred to colloquially as the ‘yellow peril’. Other journals mentioned by name include the Institute of Occupational Safety and Health, Faculty of Occupational Medicine and Annal of Exposure and Health.

A few providers also had newsletter subscriptions, such as the Occupational Health At Work Newsletter or Health and Safety Executive (HSE) newsletters, in order to keep up to date with developments.

A few providers mentioned **proactively seeking out guidance documents or other types of written information**, on an ad-hoc basis as and when needed:

"If I have had a referral about a medical condition then I might just need to do some reading on that and I would consider that to be developing my knowledge." (Private provider, sole trader)

This provider said they had usually achieved this through online searches, or by consulting certain trusted sources, such as Faculty of Occupational Medicine (FOM) guidance documents. Another provider emphasised the ‘as and when’ basis of this type of learning:

"If someone asks me or a client has got a new problem with a new chemical, I'll do some research then. So it is very much as and when required." (Private provider, Sole trader)

A few providers engaged with **trade or professional bodies**. A larger provider had senior team members involved with or on the boards of various bodies including SOM, the Commercial Occupational Health Providers Association (COHPA), FOM, and the Royal Society of Medicine (RSM). This engagement helped them keep up to date with the latest developments.

Another provider had membership of Oil and Gas UK, and considered their involvement and attendance at their meetings to be part of maintaining the best quality service:

"It's a networking opportunity and being able to learn about changes or being updated or becoming aware in the industry, so I think it's very valuable." (Private provider, 1-9 employees)

There was little evidence to suggest providers conduct their own research into OH provision. A few providers did have some engagement with academic research, usually as a result of their links to institutions, and this was unusual. For example, one sole trader was currently working on a research project, but admitted this type of work stems from his past role at a university, meaning his associates there will ask for his help on occasion. He also noted that he was not able to undertake this type of work often as it is unpaid. A larger provider discussed a member of staff undertaking

a PhD, and how evidence examined in the research might contribute to improvements in their practice.

When asked about methods for developing and maintaining knowledge, some providers found it quite difficult to expand upon why they did certain things, such as attending conferences, networking and reading journals. The way they spoke about these things was sometimes quite matter of fact, as though some of these activities were considered a very routine part of their job. Some were able to expand on this, seeing keeping up with the latest developments as being necessary to perform well in their role or to maintain their professional integrity:

"That's really quite simple, I couldn't provide the required level of service and the quality of service to my clients if I didn't do this, you know. I would be talking through a hole in my head if I didn't have the knowledge and I have never done that in my professional career and I never will." (Private provider, 1-9 employees)

"People rely on what we say as an occupational health provider. We are the professionals, really. We should know what's right and what's wrong and just making sure that we know ourselves that the information we're giving is correct." (Private provider, 10-49 employees)

5.2. Systems for developing and maintaining knowledge

Few providers had specifically designed systems for developing and maintaining knowledge, and those who did tended to have fairly informal setups. Most just pointed to regular attendance at conferences, keeping up with journals and guidance, and seeking to develop their knowledge as needs arose:

"There are other annual events that I would routinely look to attend, other than that I would say it's looking at what I think I need and I am acting upon it. I wouldn't say it was a set plan." (Private provider, Sole trader)

The ad hoc nature of developing knowledge was echoed by a number of other providers:

"We sometimes have meetings to go over change, but no set program. It's very much ad hoc." (Private provider, 10-49 employees)

A few providers referred to clinical staff keeping up to date with their CPD requirements, but this was something those staff managed themselves, rather than being part of a wider organisational system of knowledge development. A couple also mentioned using annual appraisals or reviews to reflect on learnings and identify any actions needed. The larger provider was more specific about this, updating training objectives annually in line with the business strategy, and organising CPD and other training based on this.

5.3. Engagement with the wider OH sector

Engagement with the wider OH sector was commonplace. There was general recognition that keeping in touch with others in the sector was important for sharing ideas and learning. Others pointed out that this could raise new areas of interest that they hadn't previously considered, or help them think about things in a different way:

"It gives you the picture of things that have been brought up - highlights an area of interest or new areas." (Private provider, 1-9 employees)

Others felt sharing knowledge across the sector was beneficial to improving the quality or scope of services they offered, and thereby benefitted clients and the business:

"Well it helps us keep abreast of what's going on and what we need to do to develop our service to make it contemporaneous." (Private provider, 1-9 employees)

Whilst engagement with the sector was viewed as being of high importance, it mostly tended to be on an informal basis, for example via online forums, connecting with others whilst attending events, or speaking to contacts they have made during their time in the industry (although a few providers were also members of local networks or groups). It could be that the relatively small size of the OH sector means that providers feel able to make and maintain these relationships without the need for formal channels.

6. Challenges and barriers to developing and maintaining knowledge

This chapter explores the following among OH providers involved in developing and maintaining their knowledge of OH:

- The challenges and barriers faced (Section 6.1);
- Examples of attempts to overcome these challenges and barriers (Section 6.2);
- External support providers would find useful (Section 6.3).

6.1. Challenges and barriers faced

Whilst all providers felt they were maintaining and developing knowledge to an adequate level, most felt they would like to do more, or wished it were easier to do so. Similarly to innovation, the main challenge providers faced to developing and maintaining knowledge was balancing this with delivering day-to-day services, particularly in terms of **justifying the time spent**. Whilst few providers found time an insurmountable barrier, many found it a significant challenge.

A handful of providers mentioned being so busy with the day to day activities of the business that it was difficult to dedicate time specifically to learning:

"[A challenge is] having the time outside of the kind of day-to-day admin and running and things." (Private provider, 10-49 employees)

One of these providers was concerned that they were at risk of becoming reliant on other members of the team to undertake work to build knowledge, as they themselves were so busy with running the business. Another noted resourcing constraints, caused partly by a lack of relevant skilled staff in the labour market and partly by their own organisation working at almost full capacity. They cited particular difficulty in recruiting OH nurses, resulting in time pressures on other members of the team.

Mostly, the providers that cited time as a barrier expressed this in terms of the cost of spending working time building knowledge, rather than earning money through day-to-day delivery of services:

"Lack of time is [the] biggest barrier – it's not possible to read every relevant publication that comes out, especially when you have to balance that against spending time actually delivering work, making money." (Private provider, Sole trader)

This barrier was particularly relevant for an industry primarily comprised of small and micro businesses:

“Lack of time, as it’s just me, any time spent on developing knowledge is necessarily time where I’m not delivering work, earning money.” (Private provider, Sole trader)

“[It’s] difficult to dedicate time to this rather than the day-to-day activities of the business that will make money…get immediate results. [It’s] harder for small businesses.” (Private provider, 10-49 employees)

Some providers described struggling to ‘justify’ time spent on developing knowledge or time not delivering services. One provider found this particularly difficult if they spent time trying to build their knowledge, for example by reading articles, but didn’t necessarily learn anything new:

“I’m very aware that time spent learning is time not earning money, so [I] need to find the right balance and want all time learning to be useful otherwise it feels like a waste… [it’s] not always possible to justify the time spent, as I don't always learn something new.” (Private provider, Sole trader)

The challenge of taking time away from delivering day-to-day services and the associated cost of this was particularly observable in terms of attending conferences, events and external training. These not only took staff time away from work, and therefore earning money, but usually cost money to attend, posing a dual strain for providers:

“As well as time spent learning being time not earning money, attending conferences is very expensive.” (Private provider, Sole trader)

All the sole traders raised the **high cost of conferences** as a barrier to developing knowledge, and sometimes found this to be prohibitive, both in terms of the cost of attendance, and in taking time away from working:

"Some of the more intense training like the law, report writing, that may be three days and several hundred pounds. Yes, that would be a problem then." (Private provider, Sole trader)

One provider felt that the fact that most events took place in London meant that costs of attendance were particularly high for those based in other parts of the country.

Another challenge faced by some providers was **identifying which research is best to read up on**. One provider felt that not all of the available research was of a good quality, and it could be challenging and time-consuming to find what was of most value:

“The biggest barrier is finding the good research amongst all that’s available.” (Private provider, 50-249 employees)

One provider found a lack of local academic institutions undertaking OH related work to be a barrier to their research ambitions:

“We don't have any local academic institutions that could provide us with the support in terms of research.” (NHS provider, 10-49 employees)

Whilst they were in discussions with a local university about future plans, including potentially establishing a Public Health Nursing for OH course, any change to this situation will take a considerable length of time. In the meantime, they are limited in what they can do in terms of research.

A few providers felt the focus on medical professionals and **lack of similar learning support for staff without medical backgrounds** posed challenges.

The senior manager at one provider pointed out that their administrative and managerial background meant they were not part of any networks, whereas their OH physician is connected to a number of OH networks due to their clinical background. This means they lack an avenue for developing knowledge. They believe this is partly down to the differences between occupational health provision and NHS nursing not always being well understood:

"I have spoken to many OH advisers and so many times they have assumed that I am an OH Nurse." (Private provider, 1-9 employees)

Another provider felt existing events, such as the Health and Wellbeing at Work conference held at the National Exhibition Centre (NEC), were aimed more at clinical practitioners in the field, rather than providers, and felt there was something of a gap in the market for non-clinical staff in OH.

6.2. Overcoming challenges and barriers

Few providers had identified specific ways of overcoming these challenges and barriers.

Only one provider had found a way to address challenges around dedicating time to learning. They previously found learning and knowledge development had become ad-hoc and ‘bitty’, as time for this was often postponed or cancelled. On the suggestion of a colleague from another organisation, they **scheduled fixed time into workloads** every month for knowledge development activities. So far this has been successful, and such activities now take place two mornings a month.

To combat the barrier of conference costs, one sole trader often **took on a speaking role** at these events, as this results in a free ticket. One provider addressed the challenge of identifying the best research to focus on by prioritising certain well-known sources before looking more widely. They also found attending scientific meetings and learning groups helped build their knowledge of authors of research studies.

6.3. External support providers would find useful in overcoming challenges and barriers

There was a general sense, especially amongst smaller providers and sole traders, that such barriers were hard to overcome and were to some degree only to be expected in their line of work. This was particularly the case with the most common barrier – time:

“In reality the challenge of balancing learning with running a business as a sole trader would always limit what I could do.” (Private provider, Sole trader)

Some providers felt it was more a matter of **prioritising what knowledge development activities they undertook**, or working around the barriers, rather than overcoming them altogether.

Providers had more success in making suggestions for overcoming other challenges, but there was little consistency in suggestions made.

A couple of providers mentioned that **improved staffing levels** would ease the challenge of sparing staff time for knowledge development. Both said a lack of relevant qualified staff in the labour market contributed to these resourcing constraints, with one suggesting a recruitment campaign for OH practitioners was needed, especially as they anticipated rising interest in OH as a result of COVID-19.

A provider who struggled with the cost of travelling for conferences advocated for **events in more varied parts of the country**, or perhaps conferences rotating location each year. This would reduce the London-centricity and give more providers across the UK a chance to attend and benefit from these types of events.

This provider also suggested that **regional or local networks** may be of some benefit, a thought shared by a handful of others, but this idea was not without its own challenges. One provider felt that it would certainly be beneficial to knowledge sharing, but it would have to cover all fields of OH, when some specialisms such as occupational hygienists are too spread out for local groups to work:

“On a local scale I think there's local practice in the area, there'd be quite a lot of advantage I think by people practising in occupational health [meeting up], so I am talking hygienists, technicians, doctors, nurses, safety advisers, engineers, getting together. I think that would be very useful. Sharing that way." (Private provider, Sole trader)

A number of providers, however, were already part of local networks, indicating that local networks alone cannot resolve the barriers faced.

One provider proposed that it should be **easier for non-clinicians working in the OH sector to link with OH bodies aimed at clinicians**, such as the Faculty of Occupational Medicine (FOM), to open up more avenues to knowledge development for these staff:

"So that people like me would be able to link into these groups, without actually being a doctor or a nurse… It would save isolation for non-qualified staff [from a professional perspective]." (Private provider, 1-9 employees)

Other suggestions from providers included **financial grants** for training and knowledge development, and more support with particularly resource-intensive, high level evaluations involving statistical analysis.

Another provider found the number of different organisations publishing information in different places to be challenging, and would prefer a more streamlined system for updated knowledge in the sector. They suggested having one 'essential' location online, or perhaps an email newsletter, that collates or summarises all the latest developments, with links to direct people to where they can find more information should they wish to. However, they were unsure which organisation would be best placed to oversee this:

"You feel that there should be an essential place for all updated knowledge and things that are changing, like that, but there isn't necessarily that." (Private provider, 10-49 employees)

A few providers advocated for **increased collaboration**, with some hoping to see this within the sector, whereas others wanted to see increased collaboration between OH providers and other types of organisation. One provider said OH businesses sometimes experienced a contradiction between wanting to share information with one another to further best practice, but at the same time being competitors in the marketplace:

"In the end, we're all competing against each other. It would be good if we could all share information." (Private provider, 1-9 employees)

Another provider would like a more collaborative approach between occupational health providers, General Practitioners (GPs) and the Department for Work and Pensions, with a greater understanding of one another's roles:

"[It] would be good to work together rather than what feels like working against [each other]." (Private provider, 1-9 employees)

Providers had no real interest in more trade journals or association memberships. Most were already reading journals on a regular basis as part of their knowledge development, and didn't see the benefit of journals additional to what was already on offer. With regards to association memberships, many already had SEQOHS (Safe Effective Quality Occupational Health Service) accreditation, or were involved with other OH bodies such as FOM.

One provider believed the trade bodies for OH should merge and "gold standards" for OH provision and registration should be created, to ensure quality and create a conducive environment for knowledge development:

"The NHS is considered to be the gold standard ... they have the SOM (Society of Occupational Medicine) *and the FOM* (Faculty of Occupational Medicine) *which need to merge and be connected to the Health Department."* (Private provider, 10-49 employees)

7. Conclusions

Cost-efficiencies were top of mind in the context of an industry often commissioned based on price

Many providers engaged in innovation had done so through software development. Although there was variation in the specific examples, improving efficiency was a common theme, whether through limiting the need for travel, facilitating quicker access to support or advice, or enabling access to real-time data. Improving cost-efficiency is particularly relevant in the OH industry, which is characterised by limited spending by customers. This limited spend has led to a small but competitive market, which in turn leads to small profit margins for OH providers. Although cost-efficiency was a key trigger for innovation, it was also a barrier that sometimes prevented it. Not only could the direct costs of innovation be prohibitive, but so too could the indirect costs of innovative developments (and indeed developing and maintaining knowledge) in terms of it necessitating the re-direction of staff away from 'money-making' activities. Overall, this does tend to validate the research question that informed the research; i.e. that low demand for OH services, combined with a marketplace where purchasers are often less informed, may have driven underinvestment in innovation in the market.

OH providers were also driven by a desire to provide a high-quality service to their customers

It was clear that providers were also committed to providing a high-quality service that delivered benefits to their clients. This motivation led to innovations around enhancing engagement and knowledge about OH amongst employers, not only to increase their customer-base and spend, but also through a strong belief in the benefits of OH for employees. A desire to provide a quality service was also a key driver behind the development and maintenance of knowledge amongst providers. It seemed to be commonly accepted by providers that they had a responsibility to do so, and that they simply would not be adequately performing in their role if they did not have up-to-date knowledge.

The relatively small size of many OH providers shapes their approach to innovation and knowledge development

The fact that few providers had formal procedures or structures in place to drive either innovation or knowledge development is likely linked to the fact that OH is a sector dominated by sole traders, micro and small businesses. Ad-hoc approaches were commonplace, and evaluation and academic research rare, driven both by a perceived lack of need and by limited capability for such things. However, the small scale of the OH sector had also fostered a culture in which it was common to engage

in knowledge-sharing with other providers, although this mostly takes place on an informal basis only. Interestingly however, this collaboration around knowledge-sharing does not extend to collaboration around innovation, either due to a lack of the resources that would make this possible or simply because providers do not consider this a priority.

Providers often pointed to support in solving wider issues facing the OH sector as the way to overcome barriers to innovation and knowledge development

Overall, OH providers struggled to identify specific external guidance or support that they felt would help them overcome the challenges and barriers they faced when trying to innovate or develop and maintain knowledge. Those that were able to often pointed to finding solutions to wider issues that exist for the OH sector in the UK; for example, several suggested raising awareness of and facilitating access to OH amongst SMEs (to increase uptake and therefore profitability, thus generating funds for innovation), or tackling the lack of qualified OH professionals (increasing provider capacity for service delivery and thereby freeing up capacity for innovation and knowledge development). Outside of these broader solutions, providers would welcome government funding to allow them to dedicate time and resources to innovation and knowledge development; and providers were able to identify some ideas that could support them in knowledge development, including more events outside of London, regional networks, and facilitation of easier access for non-clinicians to OH bodies such as FOM.

8. Appendices

8.1. Topic guide

Innovation in Occupational Health
In-depth interview topic guide
Note that section timings are approximate Telephone – c.65 mins

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INTERVIEWER – before beginning:

Make sure you know whether the provider is innovating, learning, doing both or doing neither (see screener).

Introduction (5 mins)

Researcher introduces themselves and purpose of interview:

I work for IFF Research, an independent research agency. Thanks for talking to me today. The interview is for the Work and Health Unit (WHU), a UK government unit which brings together officials from the Department for Work and Pensions (DWP) and the Department of Health and Social Care (DHSC), to lead the government's strategy supporting working age disabled people, and people with long term health conditions enter, and stay in, employment. To enable this, the government aims for more individuals to have access to appropriate and timely occupational health (OH) advice*.*

They've commissioned us to explore occupational health providers' experiences of innovating or trying to innovate; and approaches to maintaining and developing knowledge in the occupational health field.

We're interested in examples of innovation in occupational health provision, experiences of attempting to innovate and the challenges and barriers encountered when to trying to do so. Alongside this, we're also interested in occupational health providers' approaches to maintaining and developing their knowledge in the occupational health field – again exploring experiences of trying to do this, and the challenges and barriers encountered when to trying to do so.

The results will inform the ongoing development of policy relating to occupational health.

Just to be clear, for the purposes of this interview we are talking about occupational health provision. By occupational health we mean advisory and support services which help to maintain and promote employee health and wellbeing. OH services support organisations to achieve these goals by providing direct support and advice to employees and managers, as well as support at the organisational level e.g. to improve work environments and cultures.

We're interested in private providers of OH services as well as NHS OH departments that have sold OH services commercially to organisations outside of the NHS in the past couple of years.

While your contribution would be on an anonymous basis, we will provide the Work and Health Unit with a thematic analysis framework, including an anonymised write up of each individual interview. This will not be published. The research findings report will be published, and will be based on 20 in-depth interviews that draw together specific themes. For the sake of confidentiality, we will not include any case studies giving detail on individual organisations and any quotes will be anonymised.

GDPR statement: Before we begin, I just need to read out a quick statement based on GDPR legislation. I want to reassure you that all information collected will be treated in the strictest confidence, and that you have the right to have a copy of your data, change your data or withdraw from the research at any point. In order to guarantee this, and as part of our quality control procedures, all interviews are recorded automatically, and this is for researcher use only. Is that OK? The recording will be deleted within 12 months from the date of interview.

The interview is expected to last around 65 minutes, depending on how much you have to say.

To thank you for your time there will be a £75 donation to a charity of your choice.

ASK SECTION OF ALL:

Provider introduction (5 mins)

Just to get a bit of background about you – what's your role here? How does this relate to the provision of occupational health services?

How would you describe the organisation's main business activities? PROBE: What does it do?

- IF NECESSARY/APPROPRIATE: How does occupational health support fit within this? (By occupational health we mean advisory and support services which help to maintain and promote employee health and wellbeing. OH services support organisations to achieve these goals by providing direct support and advice to employees and managers, as well as support at the organisational level e.g. to improve work environments and cultures.)

Who are you providing these OH services to – who are your customers?

ASK SECTION OF ALL:

Innovating

So the first thing I'd like to talk about is your organisation's experiences of innovating in the occupational health field. Just to be clear, by innovating, we mean investment in new or improved services, delivery methods or technologies that benefit people's health, wellbeing and capacity to work.

I gather that your organisation [FROM SCREENER: is, or has recently been / is not] currently engaged in innovating within OH. Is that right? *Interviewer – ask next section according to their response to this.*

ASK SECTION IF IS, OR HAS RECENTLY BEEN, INNOVATING WITHIN OH:

Approaches to innovating (15-20 mins)

- How has your organisation been innovating around your OH services? PROBE: How else? *Probe until have a full range of examples. *****Interviewer – make a note of each example to use later***

  - FOR ANY EXAMPLES OF INNOVATION THAT ARE UNCLEAR: Can you tell me more about X?

- What were your reasons for innovating in this way? PROBE:
  - What were you trying to achieve?
    - *Prompt if needed – explore the relevance of: reducing costs; increasing efficiency of delivery; entering/targeting new customer markets; meeting standards/requirements; broadening the range of services offered; growing the business (i.e. attempting to increase market share); improving the quality of service offered*
  - What was the initial trigger for starting work on this?
  - *Explore whether the reasons for innovating differ between the different innovation examples they have cited – try to attach reasons to specific innovation examples (use list of innovation examples from earlier)*

- Would any of these innovations have potential to benefit typically underrepresented groups, e.g. Small or Medium-sized Enterprises (SMEs) and self-employed people? *PROMPT IF NECESSARY: For instance, by making your OH provision more accessible to SMEs or self-employed people?* IF SO:
  - Which innovations(s)?
  - In what way(s) would these benefit typically underrepresented groups? *Probe to understand which benefits result from which innovations (use list of innovation examples from earlier)*
  - Was this part of the reason for innovating, or a side-effect? Why?
  - Are SMEs/self-employed people already benefiting from this, in relation to your organisation?
    - IF YES: To what extent? How many SMEs/self-employed people?
    - IF NO: When do you expect SMEs/self-employed people to benefit from this? And in what numbers?

- Are there particular parts of your organisation involved in driving or supporting this innovation? IF SO:
  - Which parts?
  - What is their role in innovating?
- What resources are involved in this innovation? Where is this drawn from?
- Does your organisation’s innovation within OH have a defined process? *PROMPT IF NECESSARY: By that I mean some sort of structured or consistent approach that you generally use to go about your innovation work* IF SO: What is this?
- Is there any form of evaluation of your organisation’s innovation within OH? (For example, weighing up the outcomes of innovation against resources expended?) IF SO: How do you go about evaluating this?
  - IF EVALUATE: Do you look for expert help in evaluation? IF SO: Who do you seek expert help from?

- IF EVALUATE: Do you evaluate the outcomes of the innovation against the reasons you have for undertaking innovation?

ASK SECTION IF NOT INNOVATING WITHIN OH:

Reasons they would like to innovate (5 mins)

- To what extent would your organisation like to innovate within OH?
- For what reasons would you want to do this? PROBE:
  - What would you want to achieve?
    - *Prompt if needed – explore the relevance of:*
      - *Increasing profit by either reducing costs or opening up new customer markets;*
      - *Increasing efficiency of delivery;*
      - *Meeting standards/requirements;*
      - *Broadening the range of services offered;*
      - *Growing the business (i.e. attempting to increase market share);*
      - *Improving the quality of service offered*
  - What was the initial trigger for thinking about innovating?
  - Do any of your reasons for wanting to innovate within OH have anything to do with potential benefits to typically underrepresented groups, such as Small or Medium-sized Enterprises (SMEs) and self-employed people? *PROMPT IF NECESSARY: For instance, by making your OH provision more accessible to SMEs/self-employed people?* IF SO: What are these?

ASK SECTION OF ALL:

Challenges and barriers experienced in (trying to) innovate in OH (15-20 mins)

- What are the challenges and barriers in trying to innovate in OH services? PROBE: What others?
    - *Prompt if needed – explore the relevance of:*
        - *Would you say that capacity is a barrier to you innovating in your OH services, as dedicating resources to innovation takes OH doctors away from fee-earning tasks?*
        - *Would you say that cost is a barrier to you innovating in your OH services, as adopting technological innovations in OH services is too expensive?*
        - *Would you say that management of intellectual property is a barrier to you innovating in your OH services, as rights and regulations in this space limits the spread of innovative practice?*
        - *Would you say that the way the OH market operates makes it harder for you to invest in innovation, as services are commissioned by clients on the basis of cost not quality?*
    - *****Interviewer – note these barriers and challenges for reference***
- Which of these challenges / barriers have been most problematic? Why was this? ***(NB – those not innovating at all should have something to say here)***
- How, if at all, have you tried to overcome these challenges and barriers to innovating in OH? PROBE: How else? Was this successful?
    - IF RESPONDENT IS, OR HAS RECENTLY BEEN, INNOVATING WITHIN OH: Do any of these barriers or challenges and solutions relate to specific innovation examples you mentioned earlier? IF SO: Please can you tell me more about this? We're interested in specific examples and stories if possible.
        - *Explore whether the barriers/challenges and solutions to these differ between the different innovation examples they have cited – try to attach barriers/challenges and solutions to some of their specific innovation examples (use list of innovation examples from earlier)*

- ALL: What else would be useful in helping your organisation overcome these challenges and barriers when trying to innovate in OH services?
    - FOR EACH IDEA SUGGESTED: What difference would this make? Why?
    - FOR EACH IDEA SUGGESTED: How exactly would this support work in practice?
    - *Explore whether the further help wanted relates to specific innovation examples they have cited – try to attach ideas for further help to some of their specific innovation examples (use list of innovation examples from earlier)*IF HAVE SUGGESTIONS: Where might this support plausibly come from? Why?
        - *Probe around things like government funding, or support from with evaluating*
    - IF NOT EMERGED ALREADY: Do you feel your organisation would benefit from guidance or expertise to help you understand how best to innovate in your OH services? Can you tell me a bit more about this?

Collaboration (5-10 mins)

ASK SECTION IF IS, OR HAS RECENTLY BEEN , INNOVATING WITHIN OH:

- On a slightly different note, how much does your organisation collaborate with other organisations when innovating in OH services? PROBE: Why do you say that? PROBE: For what reasons do you collaborate / not collaborate?
    - IF DO COLLABORATE:
        - Who do you collaborate with in the development of services?
        - How does this work in practice? PROBE: Are there systems in place to aid collaboration? IF SO:
            - What are these?
            - How are the systems managed?
            - Why do you collaborate with these people?

ASK ALL :

- Who would your organisation ideally *want* to collaborate with when / if innovating in OH services? Why?
    - IF HAVE SUGGESTIONS FOR IDEAL COLLABORATORS: And thinking about these potential collaborators specifically, why is this not happening currently?
        - What would need to change for this to happen in future?
        - What support might be needed? IF ANY: Where might this support plausibly come from? Why?

ASK ALL :

- And just to check, I gave you our definition of innovation (*by innovating, we mean investment in new or improved services, delivery methods or technologies that benefit people's health, wellbeing and capacity to work*) – do you tend to use a different definition of this in your work? IF SO: What is this? If we use your own definition for a moment, does this throw up some other examples of how your organisation has been innovating around your OH services? *****Interviewer – if any, add these new examples to your list***

ASK SECTION OF ALL:

Learning and knowledge maintenance

So the second thing I'd like to talk about is your organisation's experiences of maintaining and developing knowledge in the occupational health field. Just to be clear, by knowledge, we mean something much broader than just evidence from specific research studies. We mean something 'bigger picture' that might involve conceptual and theoretical enquiry, expert opinion and interpretation, learning from practical experience and sharing best practice, as well as implementing new knowledge gleaned through research.

I gather that your organisation [FROM SCREENER: is, or has recently been / is not] currently engaged in maintaining and developing knowledge within OH. Is that right? *Interviewer – ask next section according to their response to this.*

ASK IF IS, OR HAS RECENTLY BEEN, MAINTAINING AND DEVELOPING KNOWLEDGE WITHIN OH:

Approaches to maintaining and developing knowledge within OH (15-20 mins)

- How has your organisation been maintaining and developing its knowledge within OH? PROBE: How else? *Probe until have a full range of examples.* *****Interviewer – make a note of each example for reference***
    - FOR ANY EXAMPLES OF MAINTAINING AND DEVELOPING KNOWLEDGE THAT ARE UNCLEAR: Can you tell me more about X?

- IF NOT EMERGED ALREADY: Do any of these involve systems for maintaining and developing OH knowledge? *INTERVIEWER NOTE – USE EXAMPLES AS NEEDED UNTIL RESPONDENT HAS A CLEAR IDEA OF WHAT IS MEANT BY SYSTEMS: By systems, we mean things like whether you have a specific member of staff whose role includes reviewing the latest OH research reports and cascading relevant learning to the team; whether you have a set CPD process in place and learning and development plans for individual staff; whether you you provide staff with training; whether you subscribe to specific journals, magazines; whether you attend events; whether you scan commissioning sites to understand what competitors are doing and how they are winning contracts; or whether you review reports from the likes of FSB to understand what employers' needs are.*
    - IF SO: What are these systems?

- What are your reasons for approaching this in this way?
    - PROBE AS NEEDED:
        - What are you trying to achieve?
        - What advantages does this approach have?
    - *Probe to explore whether a different set of reasons applies to different approaches*
    - *If specific systems were mentioned, explore which reasons apply to systems specifically*

- And to what extent does your organisation engage with the wider OH sector? PROMPT: Things like engaging with stakeholders in the sector, learning more about the sector, or developments in the sector.
- IF ENGAGE WITH WIDER SECTOR:
    - How do you go about this? IF UNCLEAR: Can you tell me more about X?
    - What does your organisation get out of this?
    - What do you do with what you learn from these interactions? Why?
    - Do you share your own learning with the wider sector?

- And to what extent does your organisation engage with and use research and evidence that relates to OH provision?
- IF DO THIS:
    - How do you go about this? PROBE: Do you conduct your own research, or partner with other organisations?
    - And could you describe to me the process of how research and evidence is used to develop your services – how you practically go from finding a piece of useful research to making a change to your service and how it is delivered?
    - What are your reasons for approaching this in this way?
        - PROBE AS NEEDED:
            - What are you trying to achieve?
            - What advantages does this approach have?

  - IF NOT EMERGED ALREADY: Do you engage in academic research or with academics to help you evaluate your OH services? Can you tell me a bit more about this? How do you use the findings of this?

ASK SECTION OF ALL:

Challenges and barriers experienced in (trying to) maintain and develop knowledge within OH (10 mins)

- What are the challenges and barriers in trying to maintain and develop knowledge relevant to OH provision? PROBE: What others?
  - ***Interviewer – note these barriers and challenges for reference***
- Which of these challenges / barriers have ever prevented you from doing this altogether? IF ANY DID: Why was this? ***(NB – those not maintaining/developing knowledge at all should have something to say here)***
- How have you overcome these challenges and barriers to maintaining/developing knowledge in OH? PROBE: How else? Was this successful?

- ALL: What else would be useful in helping your organisation overcome these challenges and barriers when trying to maintain and develop knowledge relevant to OH services?
  - PROBE: What would help you access and use research and evidence specifically?
    - *Interviewer - prompt with the following and explore their potential relevance: local networks or community of practice to discuss the knowledge and evidence base with other OH providers; trade journals; association membership*
  - FOR EACH IDEA SUGGESTED: What difference would this make? Why?
  - IF HAVE SUGGESTIONS: Where might this support plausibly come from? Why?

ASK SECTION OF ALL:

Final comments, and close (5 mins)

What else would you like to say about this subject (if anything)?

Do you have any questions for me?

Just to confirm, your contribution would be on an anonymous basis. The research findings report will be published, and will be based on 20 in-depth interviews that draw together specific themes. For the sake of confidentiality, we will not include any case studies giving detail on individual organisations and any quotes will be anonymised.

With that in mind, is there anything you've said in our conversation today that you'd prefer to be 'off the record', i.e. not part of our published research findings? Please note that this point may still appear in the report if another provider says the same thing, and will remain in the anonymised thematic analysis framework (which will not be published). **INTERVIEWER – please complete:**

Any comments to be 'off the record'?	Yes No

IF YES: Please describe what needs removing from our findings:	

As I said earlier, as a thank you for your time we would like to offer you a £75 charitable donation. Which charity would you like to donate to?

Charity name	
Charity address	

And finally, would you be happy for us to re-contact you about any other research which may doing with OH providers as part of this study?

Willing to be re-contacted?	Yes No

READ OUT: On behalf of the Work and Health Unit and IFF Research, thank you very much for your time today.